

**IN THE CLAIMS:**

Claims 1-14 and 28-33 are pending.

Claims 15-27 and 34-45 were previously canceled.

No claims are amendeded.

No claims are added.

1. (Original) A test system for testing an in-test host's support of USB peripherals, the test system comprising:
  - one or more USB interfaces configured to communicate with one or more USB ports of the in-test host to communicate USB messages with the in-test host;
  - a network interface configured to communicate with a peripheral emulator using a network communications protocol;
  - operating logic configured to perform actions comprising:
    - receiving USB command messages from the in-test host;
    - sending the received USB command messages to the peripheral emulator through the network interface using the network communications protocol; and
    - receiving USB response messages from the peripheral emulator through the network interface using the network communications protocol;
    - sending the received USB response messages through the one or more USB interfaces to the in-test host.

2. (Original) A test system as recited in claim 1, further comprising the peripheral emulator, wherein the peripheral emulator is programmed to emulate one or more USB peripherals.

3. (Original) A test system as recited in claim 1, further comprising the peripheral emulator, wherein the peripheral emulator is programmed to emulate HID, bulk, and isochronous USB peripherals.

4. (Original) A test system as recited in claim 1, further comprising the peripheral emulator, wherein the peripheral emulator comprises a general-purpose computer programmed to emulate one or more USB peripherals.

5. (Original) A test system as recited in claim 1, further comprising the peripheral emulator, wherein the peripheral emulator comprises a general-purpose computer programmed to emulate HID, bulk, and isochronous USB peripherals.

6. (Original) A test system as recited in claim 1, further comprising the peripheral emulator, wherein:

the peripheral emulator comprises a general-purpose computer;

the general-purpose computer is programmed to emulate one or more USB peripherals; and

the general-purpose computer is further programmed to generate USB response messages that test the in-test host with ranges of USB peripheral parameters.

7. (Original) A test system as recited in claim 1, further comprising the peripheral emulator, wherein:

the peripheral emulator comprises a general-purpose computer;

the general-purpose computer is programmed to emulate one or more USB peripherals; and

the general-purpose computer is further programmed to generate abnormal USB response messages in order to test the in-test host with such abnormal USB response messages.

8. (Original) A test system as recited in claim 1, wherein:

a particular USB command message is designated for a particular one of a plurality of different emulated peripheral devices;

the network communications protocol supports a plurality of logical ports;

the operating logic maintains a correspondence between emulated peripheral devices and logical ports; and

the operating logic sends said particular USB command message to one of the logical ports that corresponds to said particular one of the plurality of different emulated peripheral devices.

9. (Original) A test system as recited in claim 1, wherein the one or more USB interfaces comprise at least four USB interfaces.

10. (Original) A test system as recited in claim 1, wherein the USB messages comprise HID, bulk, and isochronous USB messages.

11. (Original) A test system as recited in claim 1, wherein the network interface comprises an Ethernet interface.

12. (Original) A test system as recited in claim 1, wherein the network communications protocol comprises an Ethernet communications protocol.

13. (Original) A test system as recited in claim 1, wherein the network communications protocol comprises an IP protocol.

14. (Original) A test system as recited in claim 1, wherein the network communications protocol comprises UDP over IP.

15. (Cancelled)

16. (Cancelled)

17. (Cancelled)

18. (Cancelled)

19. (Cancelled)

20. (Cancelled)

21. (Cancelled)

22. (Cancelled)

23. (Cancelled)

24. (Cancelled)

25. (Cancelled)

26. (Cancelled)

27. (Cancelled)

28. (Original) A method of testing an in-test host's support of USB peripherals, comprising:

receiving USB command messages from the in-test host;

packaging the received USB command messages in command data packets

formatted in accordance with a network communications protocol;

sending the command data packets to one or more peripheral emulators over network communications media;

receiving response data packets from the one or more peripheral emulators over the network communications media, wherein the response data packets are formatted in accordance with a network communications protocol;

unpackaging USB response messages from the received response data packets;

sending the unpackaged, USB response messages to the in-test host.

29. (Original) A method as recited in claim 28, further comprising emulating one or more different USB peripherals within the one or more peripheral emulators to create the incoming USB messages.

30. (Original) A method as recited in claim 28, further comprising creating abnormal USB response messages in response to the packaged USB command messages and packaging said abnormal USB response messages in the response data packets in order to test the in-test host's ability to handle such abnormal USB response messages.

31. (Original) A method as recited in claim 28, wherein the network communications protocol comprises an Ethernet communications protocol.

32. (Original) A method as recited in claim 28, wherein the network communications protocol comprises an IP protocol.

33. (Original) A method as recited in claim 28, wherein the network communications protocol comprises UDP over IP.

34. (Cancelled)

35. (Cancelled)

36. (Cancelled)

37. (Cancelled)

38. (Cancelled)

39. (Cancelled)

40. (Cancelled)

41. (Cancelled)

42. (Cancelled)

43. (Cancelled)

44. (Cancelled)

45. (Cancelled)